UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/841,661	04/24/2001	John Delta	09857-044001	6435

26161   7590   04/06/2006

FISH & RICHARDSON PC
P.O. BOX 1022
MINNEAPOLIS, MN 55440-1022

EXAMINER
AKINTOLA, OLABODE

ART UNIT	PAPER NUMBER
3624	

DATE MAILED: 04/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

Office Action Summary	Application No. 09/841,661	Applicant(s) DELTA ET AL.
	Examiner Olabode Akintola	Art Unit 3624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 April 2001*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-41* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1-41* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some *   c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1.   Claim 22 has improper dependency. In particular, claim 22 refers back to "said suspect

trade resolution process" in claim 19, however Claim 19 does not recite suspect trade resolution

process. For the purpose of examination, Examiner believes claims 22 should depend on Claim

21.

        Appropriate corrections are required.

Claim Rejections - 35 USC § 112

2.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the
> subject matter which the applicant regards as his invention.

        Claim 7 recites the limitation "said first trade price". There is insufficient antecedent

basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

        The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459

(1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1.   Determining the scope and contents of the prior art.
2.   Ascertaining the differences between the prior art and the claims at issue.
3.   Resolving the level of ordinary skill in the pertinent art.
4.   Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-4,12, 23-24, 30-37 and 39, 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vogel et al (US Patent 6944599).

Re Claims 1-4, 12, 23-24, 30, 34, 39, 41: Vogel teaches a trade filtering process for identifying and preventing the processing of suspect trades comprising: a trade monitoring process for monitoring a trade price associated with each trade of a specific item during a trading session (col. 2, lines 27-30); a trade comparison process, responsive to said trade monitoring process, for comparing said trade price of each said trade of a specific item to a known acceptable price for that specific item to identify which said trades are suspect trades (col. 6, lines 10-19); an acceptable price determination process for determining the value of said known acceptable price (col. 6, lines 10- 19): a known price determination process for determining a last known good price for a specific item being traded (col. 1, lines 49-57); a price acceptability window process for determining said known acceptable price, wherein said known acceptable price is an acceptable range of prices which span from a specific amount below said last known good price to a specific amount above said last known good price, wherein said trades which have trade prices that do not fall within said acceptable range of prices are considered suspect trades (col.2, lines 39-47); a suspect trade filtering process, responsive to said trade comparison process, for preventing the processing of said suspect trades (col. 3, lines 22-26); a suspect trade resolution process for determining if each said suspect trade is a bad trade (col. 4, lines 54-58); wherein said suspect trade resolution process includes.

Vogel does not explicitly teach a specific stock. However, Vogel teaches items. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the items as taught by Vogel to include specific stocks to identify irregular activities.

Re claims 31-33: See claim 30 analysis above. Furthermore, Vogel teaches a computer program product residing on a machine-readable medium wherein said computer readable medium is a hard drive, ROM and RAM (col. 8, lines 11-26).

Re claims 35-37: See claim 34 analysis above. Furthermore, Vogel teaches a processor and memory wherein said processor and memory are incorporated into a personal computer, a single board computer and an array of network servers (Fig 9; col. 3, lines 1-5).

4.   Claims 5-11,13-18, 20, 22, 25-28 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vogel et al (US Patent 6944599) in view of Sposito (US Patent Application 2001/0042033).

Re claim 5-7, 9-11,13-17, 20, 22, 25-28 and 38: See claims 1-4 analyses discussed above. Furthermore Vogel teaches the step of determining if each said suspect trade is a bad trade (col. 4, lines 54-58); a suspect trade repository process for storing said trade price of said suspect trade (col. 3, lines 22-32); a non-suspect price determination process for determining the trade price of at least a first non-suspect trade of the specific item to occur after said suspect trade (col. 5, lines 38-67;col. 7, lines 1-9; Figs. 4-8); a suspect trade acceptability window process for determining a suspect acceptability price range, wherein said suspect acceptability price range spans from a specific amount below said trade price of said suspect trade to a specific amount above said trade

price of said suspect trade, wherein said suspect trade is considered a non-suspect trade if the

trade price of said at least a first non-suspect trade falls within said suspect acceptability price

range (col. 2, lines 39-47); wherein said at least a first non-suspect trade is one trade (col. 5, lines

38-67); wherein said at least a first non-suspect trade is three consecutive trades (col. 5, lines 38-

67).

Vogel does not explicitly teach the steps wherein said acceptable price determination

process includes: a last known good price adjustment process for adjusting said last known good

price of said specific stock being traded to be equal to said trade price of the last non-suspect

trade; a specific amount above said last known good price and a specific amount below said last

known good price are fixed dollar amounts; wherein said specific amount above said trade price

of said suspect trade and said specific amount below said trade price of said suspect trade are

fixed dollar amounts; said specific amount above said last known good price and said specific

amount below said last known good price are a percentage of a first trade price; wherein said

specific amount above said trade price of said suspect trade and said specific amount below said

trade price of said suspect trade are a percentage of said trade price of said suspect trade; a last

known good price initiation process for adjusting said last known good price of said specific

stock being traded to be equal to a reference value whenever said stock is being traded for the

first time in said trading session; said reference value is said trade price of said specific stock

being traded; said reference value is a previous day's closing price;

However, Sposito teaches the steps wherein said acceptable price determination process

includes: a last known good price adjustment process for adjusting said last known good price of

said specific stock being traded to be equal to said trade price of the last non-suspect trade

(section [0030]); said specific amount above said last known good price and said specific amount

below said last known good price are fixed dollar amounts (section [0018]); wherein said

specific amount above said trade price of said suspect trade and said specific amount below said

trade price of said suspect trade are fixed dollar amounts (section [0018]); said specific amount

above said last known good price and said specific amount below said last known good price are

a percentage of a first trade price (section [0017]); wherein said specific amount above said trade

price of said suspect trade and said specific amount below said trade price of said suspect trade

are a percentage of said trade price of said suspect trade (section [0017]); a last known good

price initiation process for adjusting said last known good price of said specific stock being

traded to be equal to a reference value whenever said stock is being traded for the first time in

said trading session (section [0023]); said reference value is said trade price of said specific stock

being traded (section [0023]); said reference value is a previous day's closing price (section

[0031]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the

invention to modify Vogel to include the steps disclosed above as taught by Sposito so that

acceptable trade prices can be automatically adjusted and updated without any need for human

input thereby creating a new range or boundaries of acceptable trade prices for items as the trade

progresses.

Re claims 8 and 18: See claim 7 and 17 analyses above. Vogel and Sposito do not

explicitly teach the step wherein said percentage of said last known good price is 15%; said

percentage of said trade price of said suspect trade is 5%. However, Sposito teaches the specific

amount of last known good price and specific amount of said trade price of said suspect trade are a percentage.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to set these numbers to 15% and 5% respectively as a matter of design choice.

Re claims 19, 29 and 40: Vogel and Sposito do not explicitly teach a validity filter process for monitoring and examining a trade volume and a trade price wherein said validity filter process discards trades whose said trade volume is negative, whose said trade volume is zero, whose said trade price is negative, and whose said trade price is zero.

Official notice is hereby taken that it is old and well known in the electronic trading systems to remove trades whose trade volume and trade price do not meet certain conditions.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the aforementioned steps to remove trades that are not desirable for the trading activity thereby making the system more efficient.

Conclusion

5.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Olabode Akintola whose telephone number is 571-272-3629. The examiner can normally be reached on M-F 8:30AM -5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent Millin can be reached on 571-272-6747. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

OA

HANI M. KAZIMI
PRIMARY EXAMINER